INFORMATION SHEET

ORDER NO.
KAUTZ VINEYARDS, INC.
IRONSTONE VINEYARDS
CALAVERAS COUNTY

Kautz Vineyards, Inc. (Discharger) owns and operates Ironstone Vineyards, which is located in the town of Murphys, Calaveras County. The existing WDRs (Order No. 5-01-063) prescribed requirements for both the Ironstone Vineyards winery wastewater treatment and disposal system, and the use of recycled water obtained from the Murphys Sanitary District wastewater treatment plant for the irrigation of vineyards and orchards. Order No. R5-2007-0049 now regulates the discharge of recycled water. This Order only prescribes requirements for treatment, storage, and disposal of winery process wastewater.

The Regional Water Board adopted WDRs Order No. R5-2007-0049 for Ironstone Vineyards at its 4 May 2007 meeting of the Regional Board.

On 27 July 2007, the Discharger submitted a letter requesting that WDRs Order No. R5-2007-0049 be amended to allow winery process wastewater to be land applied to a new land application. The request was made because the Discharger identified an overlap in the land application areas for Ironstone Vineyards winery process wastewater, and the use of reclaimed water on Hay Station Ranch. This Order is being revised to allow the discharge of winery process wastewater to the new land application areas.

Although WDRs Order No. 5-01-063 allows a monthly average discharge of 146,000 gpd, process wastewater flows are significantly lower. Based on flow monitoring data for 2004, the monthly average wastewater flows generated at the winery range from approximately 7,300 gpd during low production periods to approximately 17,700 gpd during periods of peak production or the crush. Peak daily flows during crush were approximately 48,000 gpd. The Discharger's RWD states that it intends to maintain ~~the~~ this 2004 level of production ~~to that which was produced in 2004~~ for a least the next five years, and that wastewater flows should not increase. Process wastewater includes wash water from cleaning of storage tanks and floors, spilled or waste wine product, and residual liquid from the wine tanks.

At the time Order No. 5-01-063 was adopted, the Discharger could not comply with specific Discharge Prohibitions and Limitations, including TDS and nitrate effluent limitations, spray irrigation during precipitation events or when the ground is saturated, and BOD and total nitrogen loading to the spray disposal areas. Therefore, the Discharger was given one year from the adoption date to come into full compliance with the WDRs.

The Discharger did not make the necessary improvements to comply with the existing WDRs. Therefore in July 2004, the Executive Officer issued Cleanup and Abatement (C&A) Order No. R5-2004-0712, which provided a time schedule for compliance, and required the Discharger to submit several technical reports, including a Report of Waste Discharge to update the WDRs based on the proposed improvements.

The Discharger proposes to upgrade the existing wastewater treatment system by installing a new biological treatment system and treated process wastewater storage tank. The proposed

system will utilize a high rate two-stage trickling filter and subsurface flow vegetated beds treatment system. Treated process wastewater will be storage in a 144,000 gallons above ground tank and then be reused as a source of irrigation water for ~~58~~ 44.4 acres of ~~vineyards~~pasture land and/or other crops.

Wastewater loading rate calculation for the new land application areas indicate that (1) BOD loading rates are less than 100 lbs per acre per day and should not cause nuisance conditions, (2) nitrogen loading rates are below typical crop uptake rates and should not impact groundwater quality, and (3) TDS loading to the land application areas should not cause an increase in the salt concentrations in the underlying groundwater.

Solid/semi-solid wastes such as pomace (skins, seeds, pulp, stems, etc. resulting from the grape crush) and filter cake media (bentonite and diatomaceous earth) are also generated by the processing operations. Such solid/semi-solid wastes are segregated from the process wastewater stream by cleanup processes (sweeping materials from floor drains) or by screens in the floor drains. Solid and semi solid waste are placed in a composting area, and once composted are reused as fertilizer/soil amendments in the landscaping areas throughout the winery.

Domestic wastewater generated at the winery is discharged into the Murphys Sanitation District (MSD) collection system and is treated at the MSD wastewater treatment plant.

This Order limits the amount of wastewater inflow to the winery wastewater treatment system to 18,000 gpd (monthly average) and an annual total of 4.5 million gallons. In addition, the Order prescribes effluent limits for BOD, TDS, inorganic dissolved solids, and total nitrogen, and also requires the Discharger to submit a Construction Report, an Operation and Management Plan, a Groundwater Monitoring Installation Workplan and Installation Report, and a Background Groundwater Quality Study Report.

Surface water drainage in the area is to Six Mile Creek, which is a tributary to Angels Creek that flows into New Melones Reservoir.

JSK 8/20/07